

**REMARKS**

Claims 1-21 are pending. By this Amendment, claims 1 and 12 are amended for the sake of clarity. Applicant respectfully submits that the amendments do not narrow the claims because the amendments only make explicit that which a reasonable interpretation of the claims would have required prior to amendment. No new matter is added. Reconsideration of the application is respectfully requested.

The Final Office Action rejects claims 1, 5-13 and 17-21 under 35 U.S.C. §102(e) over U.S. Patent No. 6,644,767 to Silverbrook; and rejects claims 2-4 and 14-16 under 35 U.S.C. §103(a) over Silverbrook in view of U.S. Patent Application Publication No. 2003/0027342 to Sheridan et al. (Sheridan). Applicant respectfully traverses the rejections.

As previously discussed, Silverbrook does not disclose, teach or suggest a plurality of ejection structures associated with an ejector nozzle and arranged to individually move in a chamber such that a variable volume of fluid is ejected from the associated ejector nozzle. Contrary to the position stated in the Final Office Action and the Advisory Action, the shutters 31.1 and 31.2 cannot reasonably be considered to be ejection structures.

To clarify the meaning of the term "ejection structure" as recited in the pending claims and described throughout the specification, claims 1 and 12 are amended to specify that the ejection structures cause ejection of fluid by movement thereof. Applicant respectfully submits that this meaning is implicit in the term "ejection structure," especially to one of ordinary skill in the art in view of the specification and drawings as originally filed.

The Advisory Action attempts to disregard this distinction by characterizing this as a "manner in which the device is used." Applicant respectfully disagrees with this characterization. Applicant has described an ejection structure consistently as a structure that

moves to cause fluid to be ejected. Thus, the term "ejection structure" is defined by what it does, not by how it is used.

A person of ordinary skill in the art would have readily understood the term "ejection structure" to mean a structure that causes ejection, especially in view of Applicant's disclosure. While the Examiner is to give terms their broadest reasonable interpretation, the broadest reasonable interpretation must be consistent with the interpretation that those skilled in the art would reach. See MPEP §2111, citing *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999) (emphasis added).

Moreover, all claim limitations must be taught or suggested by the prior art to reject claims. This includes functional limitations. See MPEP §2173.05(g). Therefore, the implicit functionality of an ejection structure, now explicitly recited in the independent claims, must be fully considered.

The shutters disclosed by Silverbrook do not cause ejection of fluid, and thus are not ejection structures as recited in claims 1 and 12. On the contrary, the shutters are only capable of preventing ejection of fluid by being in a closed position. The possibility that the shutters 31.1, 31.2 may be positioned between an opened position and a closed position to allow a different volume of an ink drop to be ejected, the ejection of ink is caused by movement of a transducer 62, not by movement of the shutters 31.1, 31.2. Clearly, the transducer 62 disclosed by Silverbrook is an ejection structure. However, the transducer 62 of Silverbrook does not meet the features recited in claims 1 and 12.

Not only do the shutters not cause ejection of the fluid, as discussed above, Silverbrook specifically discloses that a single shutter is associated with a particular nozzle, shutter 31.1 being associated with nozzle 10.1, 30.1 and shutter 31.2 being associated with nozzle 10.2, 30.2. Thus, Silverbrook specifically teaches associating a single shutter with

each of a plurality of nozzles, not a plurality of "ejection structures" associated with an ejector nozzle, as recited in claims 1 and 12.

Therefore, Silverbrook does not teach or suggest the ejector of claim 1 or the method of claim 12.

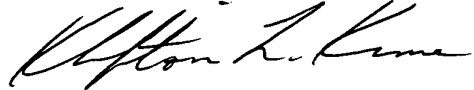
Sheridan does not remedy the deficiencies of Silverbrook discussed above. Therefore, neither Silverbrook nor Sheridan, either alone or in permissible combination, teaches or suggests the ejector of claim 1 and the method of claim 12.

For at least the reasons discussed above, claims 1 and 12 are patentable over Silverbrook and Sheridan, alone or in permissible combination. Claims 2-11 and 13-21 variously depend from claims 1 and 12, and thus also are patentable over Silverbrook and Sheridan, alone or in permissible combination, for at least the reasons set forth above, as well as for the additional features they recite.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-21 are earnestly solicited.

Should the Examiner believe that anything further would be desirable to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Klifton L. Kime  
Registration No. 42,733

JAO:KLK/hs

Attachments:  
RCE  
Petition for Extension of Time

Date: April 4, 2006

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

**DEPOSIT ACCOUNT USE  
AUTHORIZATION**

Please grant any extension  
necessary for entry;  
Charge any fee due to our  
Deposit Account No. 24-0037